

# Be a **LUB**Expert®

## Grease Bearings Right



Available  
with  
**Dynamic  
Analysis**

# LUBExpert®

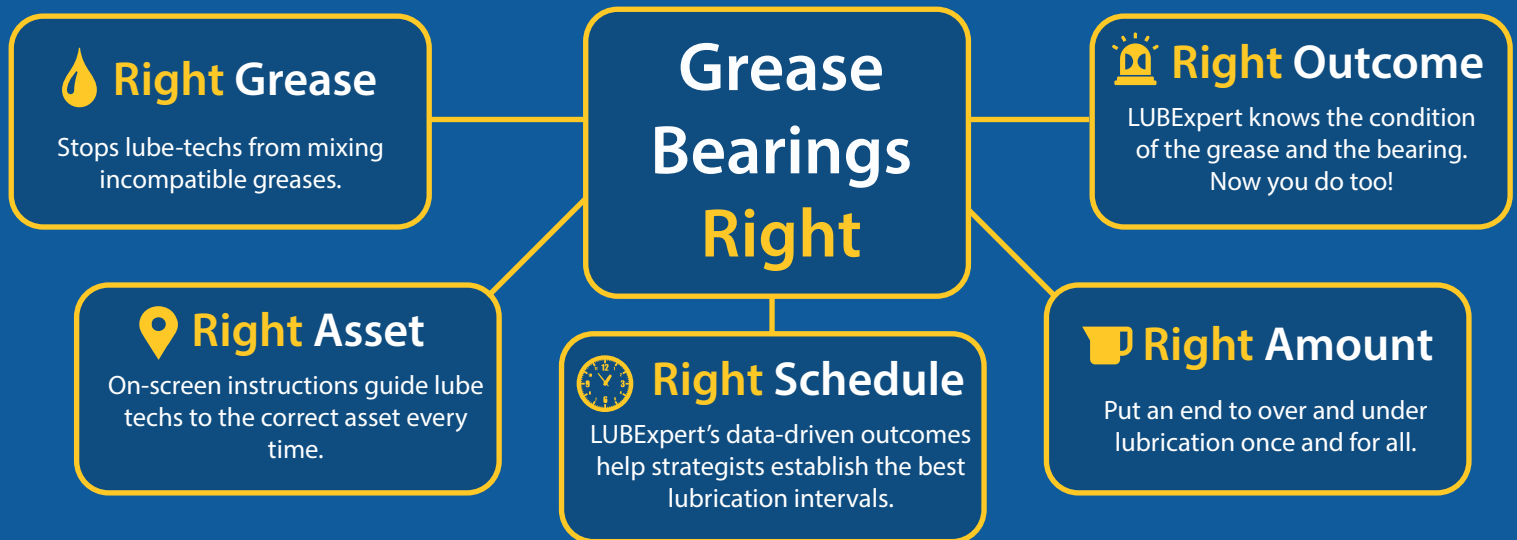
A complete ultrasound solution to manage your acoustic lubrication and condition monitoring program

## LUBExpert tells us when to grease... and when to stop.

Grease reduces friction in bearings. Less friction means longer life. LUBExpert alerts you when friction levels increase, guides you during re-lubrication, and prevents over and under lubrication.

## LUBExpert Dynamic connects the Lube Team with the ConMon Team.

LUBExpert Dynamic delivers advanced analysis of bearing condition. During grease replenishment, dynamic data is captured in the background. These outcomes are fed to the condition monitoring team to help assess real-time bearing condition.



## LUBExpert Features



### Bearing Database

LUBExpert maintains a database of all your assets including bearing type and dimensions.



### Automation

LUBExpert removes the guesswork by automatically calculating the stabilization time between grease pumps.



### Guided & Free Modes

Lube techs can choose between "FREE" and "GUIDED" modes to grease bearings right.



### Work Orders

The workflow inherent in LUBExpert restores order and discipline to your lubrication program.



### Shopping List

LUBExpert reminds you to bring the right grease type, gun, and quantity for the day's lube tasks.



### System Messaging

LUBExpert uses messaging to document each decision made by the lube-tech. I.E. "safely risk", "asset not in operation".



### LUBExpert Dynamic

With the **Dynamic Option**, you'll reduce data collection time while increasing the efficiency



# Ultranalysis<sup>®</sup> Suite 3

Manage, trend, and analyze your ultrasound data.

- Create hundreds of databases and surveys
- Track grease types and grease consumption
- Precise diagnosis with SDT's 4 Condition Indicators
- Sort assets by status: lubrication success/failure, over greased, shorten interval, suspected bearing failure, ...

During any lube task, the **Dynamic Option** collects analytics in the background, thereby providing asset condition data to both the lube and condition monitoring teams. This is a win for communications, efficiency and overall reliability.



## Right Grease

Grease Name	PolySuprem
	Mobylux EP2
	PolySuprem
	IF 19
	Thermax



## Right Amount

Survey Settings			
Bearing OD	110.00 mm	Rotating speed	2980 RPM
Bearing ID	50.00 mm	Replenishment	Side
Bearing width	27.00 mm	Acquisition time	2 sec
Adjusted calculated grease quantity	14.00 g	Shots	7
Injection steps:	1st 1	2nd 1	rest 1
Stabilization time	7 sec		



## Right Schedule

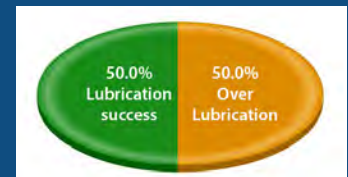
Survey Settings	
Interval	50 day(s)
	hour(s)
	day(s)
	week(s)
	month(s)



## Right Asset



## Right Outcome



## Break Down the Silos

Dynamic data collected by LUBExpert is displayed in UAS3 in the Time and Frequency domain.

This dual reliability benefit saves time while removing information silos.



The lubrication team can now collect dynamic data for the condition monitoring team.

Asset condition information is now transparent across departments.

The **Dynamic Option** completely removes the information gap between lubrication and condition monitoring teams. By having the Lube Team collect and (if necessary) monitor Dynamic data, it becomes an integral member of the Condition Monitoring Team.



# LUBExpert Kit



- LUBExpert Standard Device
- Universal Battery Charger
- Ultranalysis Suite 3 (UAS3) Master
- Headphone, Neckband
- Shoulder Strap and Leather Belt Holder w/ Clip
- USB Cable
- SDT USB Memory Drive
- LUBExpert Custom Carrying Case
- LUBEsense1 Contact Sensor w/ Cable and Magnetic Bases
- LUBEadaptor
- Grease Gun Mounting Cradle

## LUBExpert Specifications

General		Temperature Measurement	
External Sensor(s)	SDT LUBEsense1 only	Measuring Range	-70 to +380°C /-94 to +716°F
Internal Sensor(s)	Infrared Temperature	Accuracy (0 to 50°C / 32 to 122°F)	± 0.5 °C / ± 32.9 °F
Software Compatibility	Ultranalysis Suite 2 Ultranalysis Suite 3	Field of View (attenua- tion of 50%)	10°
System		Data Collector	
Operating System	Linux	Memory Capacity	More than 10,000 data distributed over more than 10,000 measure- ment locations
CPU	ARM9		
Data memory	256 Mb	Mechanical Characteristics	
Signal Processing		Display	Graphic Backlit LCD (128 x 64)
Dynamic range	109 dB	Housing	Extruded Aluminum, Shockproof Rubber Protection
Resolution	16 bits	Dimensions	226 x 90 x 40 mm / 8.90 x 3.54 x 1.57 in (L x W x H)
Sampling rate	256 kHz	Weight	830 g / 29.3 oz
Response time	<10 ms	Operating and Storage Temperature	-15 °C to +60 °C / 14 °F to 140 °F
Ultrasound Measurement		IP rating	IP 40
Measuring Range	-15 to 120 dBµV	Power	
Resolution	0.1 dBµV	Battery	Rechargeable NiMH battery.
Signal to Noise Ratio	-6 dB	Nominal Capacity	4.4 Ah
Bandwidth	36.1 to 40.4 kHz	Autonomy	+8 Hours
Condition Indicators	RMS, maxRMS, Peak, Crest Factor	Recharge Time	6 Hours
		Battery Charger	110-230 VAC, 50/60 Hz
Heterodyne Sampling Rate	8000 Samples/s (dynamic version)	Headphone	
		Noise Reduction Rating	25 dB

### Our Mission

SDT provides ultrasound solutions that help our customers gain a better understanding about the health of their factory. We help them predict failures, control energy costs, and improve product quality while contributing to the overall reliability of their assets.

Your SDT Certified Partner

